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	Y, STANGER, MALUR	HENNING, MATTHEW T		
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ALEXANDRIA, VA 22314			2131	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/743,729	KOBAYASHI ET AL.			
		Examiner	Art Unit			
		Matthew T. Henning	2131			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)[X]	Responsive to communication(s) filed on 27 Se	entember 2005				
, —	This action is FINAL . 2b) ☐ This action is non-final.					
3)						
٠,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) 🖂	Claim(s) <u>1-13</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
6)🖂	6)⊠ Claim(s) <u>1-13</u> is/are rejected.					
7)	_					
8) 🗌	8) Claim(s) are subject to restriction and/or election requirement.					
Applicati	ion Papers					
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>12/24/2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
2) Notic 3) Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

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1 This action is in response to the communication filed on 9/27/2005. 2 **DETAILED ACTION** 3 Response to Arguments Applicant's arguments with respect to claims 1-13 have been considered but are moot in 4 view of the new ground(s) of rejection. 5 6 Claims 1-13 have been examined. 7 All objections and rejections not set forth below have been withdrawn. 8 9 **Drawings** 10 The drawings are objected to under 37 CFR 1.83(a). The drawings must show every 11 feature of the invention specified in the claims. Therefore, the transmitting and receiving packets to and from another relevant one of the client apparatuses belonging to a second network, 12 different from the first network, via the firewall apparatus and the second network and without 13 passing through the first network must be shown or the feature(s) canceled from the claim(s). 14 15 No new matter should be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to 16 the Office action to avoid abandonment of the application. Any amended replacement drawing 17 sheet should include all of the figures appearing on the immediate prior version of the sheet, 18 even if only one figure is being amended. The figure or figure number of an amended drawing 19 should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure 20 21 must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the 22

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drawings for consistency. Additional replacement sheets may be necessary to show the
renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an
application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will
be notified and informed of any required corrective action in the next Office action. The
objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The independent claims 1, and 11-13 recite transmitting and receiving packets to and from another relevant one of the client apparatuses belonging to a second network, different from the first network, via the firewall apparatus and the second network and without passing through the first network. However, the specification provides no support for this limitation.

Furthermore, claims 1-12 recite "relevant client[s]". The specification provides no support for a relevant client and gives no suggestion as to the meaning of a relevant client.

See the rejections of claims 1-13 under 35 USC 112 1st Paragraph below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In this particular instance, the transmitting and receiving packets to and from another relevant one of the client apparatuses belonging to a second network, different from the first network, via the firewall apparatus and the second network and without passing through the specification supports transmitting and receiving packets to and from another relevant one of the client apparatuses belonging to a second network, different from the first network, via the firewall apparatus and the second network, which can be seen in the specification on page 9, the specification does not provide support for doing so without passing through the first network. As such, the ordinary person skilled in the art would be unable to determine whether the applicants had possession of such at the time of application.

Furthermore, claims 1-12 recite the limitation "relevant client" which is not supported by the specification. The specification certainly disclosed clients, but is silent with respect to the claimed "relevant client". As such, the ordinary person skilled in the art would have been unable to determine whether the applicants had possession of such at the time of application.

Therefore, claims 1-13 are rejected for failing to meet the written description requirement of 35 USC 112 1st Paragraph.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "relevant client" in claims 1, 11 and 12 is a relative term which renders the claim indefinite. The term "relevant client" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For example, one of ordinary skill in the art would be unable to determine what constitutes a "relevant client" over just a "client". Would a "relevant client" only include paying clients? Would a "relevant client" only include clients which are active for at least a minimum period of time? The specification is silent as to what would constitute a "relevant client" and as such, the ordinary person skilled in the art would not be able to determine the scope of the claim. Therefore, claims 1-12 are rejected for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention. The examiner will assume that any client in communication with a server is a "relevant client". The examiner suggests following the convention of claim 13 by using "a first client", "a second client", etc. as this seems to be consistent with the specification.

Claim Rejections - 35 USC § 103

- 22 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness 23 rejections set forth in this Office action:
- 24 A patent may not be obtained though the invention is not identically disclosed or described as set
- forth in section 102 of this title, if the differences between the subject matter sought to be 25

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patented and the prior art are such that the subject matter as a whole would have been obvious

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subject matter pertains. Patentability shall not be negatived by the manner in which the

at the time the invention was made to a person having ordinary skill in the art to which said

invention was made.

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Claims 1-8, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegel (US Patent Number 6,484,261), in view of Vellanki et al. (US Patent Number 5,999,979) hereinafter referred to as Vellanki, as evidenced by Slavin et al. (US Patent Number 6,675,193) hereinafter referred to as Slavin.

Regarding claim 1, Wiegel disclosed a stream server apparatus (See Wiegel Fig. 1 Element 116 and Col. 10 Lines 44-59) connected to client apparatuses (See Wiegel Fig. 1 Elements 100a – 100n and 114a and 114b) and a firewall apparatus for inhibiting a packet from illegally accessing a first network (See Wiegel Fig. 1 Element 106 and Col. 10 Lines 60-66), said stream server apparatus distributing stream data to said client apparatuses (See Wiegel Col. 10 Lines 55-59) and comprising: a first interface which transmits and receives packets to and from a relevant one of the client apparatuses via the first network (See Wiegel Elements 100 and 102) without passing through the firewall apparatus (See Wiegel Col. 10 Lines 55-59 and Fig. 1 Elements 116, 104, 102a, and 100a), but Wiegel failed to specifically disclose the first interface transmitting and receiving packets to and from another relevant one of the client apparatuses (114) belonging to a second network (112) different from the first network via the firewall apparatus and the second network and without passing through the first network. However, it was well known in the art that remote clients could communicate with local servers, and therefore it would have been obvious to the ordinary person skilled in the art to have allowed communications between the local server and the remote end stations 114 of Wiegel. This is

evidenced by Slavin in Col. 4 Lines 51-65. As such, Wiegel disclosed that communications with

remote end stations 114 occur through the firewall 106 (See Wiegel Col. 10 Line 60 – Col. 11

Line 10).

Wiegel further failed to disclose a second interface which transmits and receives packets to and from the another one relevant client apparatus belonging to a third network (112) different from the first network, via the third network and without passing through the firewall apparatus or the first network, said second interface being connected to a wide area network; a stream transport management module which specifies said first interface or said second interface in accordance with a network attribute and a type of a communication protocol of one of the relevant one client apparatus or the another relevant one client apparatus; and a process module which executes a communication process based on the communication protocol relative to the relevant one client apparatus ore the another relevant one client apparatus via the specified interface. Wiegel did however specify that the communications could be UDP (See Wiegel Col. 12 Lines 5-15).

Vellanki teaches that firewalls block certain types of communications, such as UDP (See Vellanki Col. 2 Lines 31-46), and that in order to stream UDP messages a proxy can be set up on a separate connection than the firewall in order to bypass the security settings of the firewall (See Vellanki Col. 13 Lines 4-26) and that in order to set up the connection, the user makes requests via the proxy and the firewall depending on the type of communication (See Vellanki Col. 9 Line 52 – Col. 10 Line 3 and Col. 13 Lines 4-26), and the server replies accordingly to the requests via the proxy or firewall depending on the request (See Vellanki Col. 9 Line 52 – Col. 10 Line 3 and Col. 13 Lines 4-26 and Col. 4 paragraphs 4-6).

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It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Vellanki in the communication system of Wiegel by setting up a separate connection via a proxy to the remote end stations in order to communicate types of packets which the firewall blocks, such as UDP packets. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide a means for allowing UDP streams, or other communication types blocked by the firewall, to bypass the firewall. Regarding claims 2-3, the combination of Wiegel and Vellanki disclosed that the process module executes a stream data distribution process based on a same communication protocol for both the relevant one of the client apparatuses belonging to the first network and the another relevant one of the client apparatuses belonging to the second network different from the first network and that the protocol uses UDP (See Wiegel Col. 12 Lines 5-15 and Vellanki Col. 13 Lines 4-26). Regarding claim 4, the combination of Wiegel and Vellanki disclosed a control request reception unit which notifies an ID of the interface specified by said stream transport management module to the client apparatuses (See Vellanki Col. 9 Line 59 - Col. 10 Line 3 and Col. 13 Lines 10-26). Regarding claim 5, the combination of Wiegel and Vellanki disclosed that the stream transport management module specifies said first interface, if a client apparatus of the client apparatuses belongs to the second network different from the first network for which the firewall apparatus inhibits illegal accesses and if the communication protocol includes a reception process of a packet on a side of the stream server apparatus (See Vellanki Col. 9 Line 52 – Col. 10 Line 3).

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1 Regarding claim 6, the combination of Wiegel and Vellanki disclosed that the stream 2 transport management module specifies said second interface, if a client apparatus of the client 3 apparatuses belongs to the second network different from the first network for which the firewall 4 apparatus inhibits illegal accesses and if the communication protocol does not include a 5 reception process of a packet on a side of the stream server apparatus (See Vellanki Col. 13 6 Lines 4-26). 7 Regarding claim 7, the combination of Wiegel and Vellanki disclosed that the stream transport management module specifies said second interface, if a client apparatus of the client 8 9 apparatuses belongs to the second network different from the first network for which the firewall 10 apparatus inhibits illegal accesses and if the communication protocol is a stream data distributing 11 protocol (See Vellanki Col. 13 Lines 4-26 UDP). Regarding claim 8, the combination of Wiegel and Vellanki disclosed that the stream 12 13 transport management module specifies said first interface, if a client apparatus of the client 14 apparatuses belongs to the same network as a network to which the stream server apparatus 15 belongs (See Wiegel Col. 10 Lines 55-59). 16 Claim 11 is rejected for the same reasons as claim 1 above and further because the server was depicted as being attached to a network (See Wiegel Fig. 1). 17 18 Claim 12 is rejected for the same reasons as claim 1 above and further because the system used software to implement the functionality (See Vellanki Col. 4 Paragraphs 4-6). 19 20 Claim 13 is rejected for the same reasons as claims 1-3 above.

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1 Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of 2 Wiegel and Vellanki as applied to claim 1 above, and further in view of Young et al. (US Patent 3 Application Publication Number 2003/0033418) hereinafter referred to as Young. 4 The combination of Wiegel and Vellanki disclosed providing an ID of the specific 5 interface (See the rejection of claim 4 above) but failed to disclose that the ID being not a local 6 ID distinguishable by the particular network for which the firewall apparatus inhibits illegal 7 accesses but a global ID capable of being translated into the local ID by a network relay 8 apparatus en route to the client apparatus requested stream data distribution. 9 Young teaches that in a proxy system for circumventing a firewall, the client should be 10 notified of the global IP address of the proxy (See Young Paragraphs 0007 and 0009). 11 It would have been obvious to the ordinary person skilled in the art at the time of 12 invention to employ the teachings of Young in the proxy system of Wiegel, and Vellanki by 13 supplying the public IP address of the proxy to the client. This would have been obvious 14 because the ordinary person skilled in the art would have been motivated to allow the client to send messages to the server without the firewall blocking the messages. 15 16 Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination 17 of Wiegel and Vellanki as applied to claim 1 above, and further in view of Day et al. (US Patent 18 Number 5,996,025) hereinafter referred to as Day. 19 The combination of Wiegel and Vellanki disclosed a stream transport processing unit for 20 executing stream data distribution to the client apparatus based upon one stream data distribution 21 protocol (See Vellanki Col. 13 Lines 4-26) but failed to disclose a bandwidth management

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1 processing unit in the server for executing bandwidth control communication based on a control

2 program for controlling a bandwidth of the stream data distribution.

Day teaches that in a streaming system, in order to ensure quality of service to the connected clients a bandwidth manager should be employed in the server (See Day Col. 2 Lines 62-66).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Day in the server system of Wiegel, and Vellanki by providing bandwidth management at the server. This would have been obvious because the ordinary person skilled in the art would have been motivated to optimize server resource use without degrading the services already in progress.

11 Conclusion

12 Claims 1-13 have been rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this

2 final action.

3 Any inquiry concerning this communication or earlier communications from the

4 examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790.

5 The examiner can normally be reached on M-F 8-4.

6 If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the

8 organization where this application or proceeding is assigned is 571-273-8300.

9 Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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19 Matthew Henning

20 Assistant Examiner

21 Art Unit 2131

22 11/16/2005

'ayaz sheikh

SUPERVISORY PATENT EXAMINEP

TECHNOLOGY CENTER 2100